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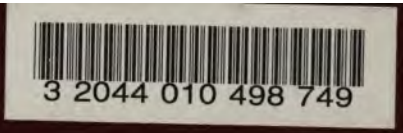
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UNNOTICED THEORIES

OF

SERVETUS.

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THE UNNOTICED THEORIES OF

SERVETUS,

A

DISSERTATION

ADDRESSED TO THE

MEDICAL SOCIETY OF STOCKHOLM.

By GEORGE SIGMOND, M.D.

LATE OF JESUS COLLEGE, CAMBRIDGE,

AND FORMERLY

PRESIDENT OF THE ROYAL PHYSICAL SOCIETY OF EDINBURGH.

LONDON:

PRINTED FOR J. H. BURN, KING STREET,

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1867, Oct. 19.
Bill of
John Jeffries, M.D.,
and
Benj. Guy Jeffries, M.D.
of Boston.
(H. C. 1815 & 1857.)

TO THE

PRESIDENTS AND MEMBERS

OF

THE ROYAL COLLEGES OF LONDON,

AS THE REPRESENTATIVES

OF THE LEARNED, THE LIBERAL, AND ENLIGHTENED

PROFESSORS OF MEDICAL SCIENCE,

THIS SMALL VOLUME IS DEDICATED

BY

GEORGE SIGMOND, M.D.

Υμεις, ω παντα εν πᾶσι φυσει και παιδειᾳ χρηστοι, και μετριοι, και φιλανθρωποι, και της Βασιλειας αξιοι, τουτοις τοις λογοις επινευσατε.

Athenagoræ Atheniensis Legatio Imperatoribus Antonino et Commodo.—*Justin. Martyr.*

INTRODUCTION.

In the Autumn of the last year I left England with the intention of visiting the most interesting parts of the North of Europe, and there collecting information on different subjects connected with natural history and medical science. I purposed remaining in Stockholm until the winter would allow me to cross the ice, and pass from Lapland into Finland. After some time spent in Copen-

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make an impression on me. His observations on English education, and upon our different public Institutions, his comparisons with those of his native country, showed he had studied them not so much to gratify his own thirst of knowledge, as to be of utility to others. Of my own immediate friends too I must speak; I cannot pass by the opportunity of offering a tribute of regard and admiration to Ekström, a man who adorns the profession of surgery: he studied for some time under Sir Astley Cooper, whose footsteps he follows in a manner not unworthy the example of so great a master. Of Professor Riccius too, who has begun a most interesting anatomical collection; of his amiable and learned brother, I cannot but speak in the language of an admirer of talent, and with the feelings which their friendship could not but inspire.

It was, however, not the members of the medical profession alone, whose kindness afforded me facilities, of which some time hereafter I may be enabled to avail myself, but to almost every individual of note in Sweden, to whom I had an introduction, that I owe much. The desire to advance his native country, seems to be inherent in the heart of every distinguished person. And ever will the prosperity of Sweden be the wish of one who has had so much reason to be grateful. I cannot suffer this opportunity to pass without expressing the high sense I must ever entertain of our amiable and much respected ambassador at the Court of Stockholm. The kind, the affable manners of Lord Bloomfield have endeared him to every Swede; and his patronage of the fine arts must procure for him the esteem of all who love them. His daily

kindness, his constant hospitality, can never be forgotten by me.

To the Russian ambassador, Count Suchelen, deeply am I indebted for some of the happiest hours I passed: in his magnificent library, my mornings flew with a rapidity too great for the shortness of life. The treasures he has collected are well known to every lover of books: all that is curious, all that is splendid or useful, adorn this celebrated collection; whilst the mild, the gentle, the excellent possessor enjoys no greater treat than that of welcoming the lover of literature, and pointing out to him with the greatest accuracy, erudition, and taste, all that is worthy attention. From his long experience to gather instruction and knowledge, is a delight which, to have enjoyed, forms an era in existence. Long may he, in the midst of his

charming family, whose kindness must ever live in my heart, enjoy blessings as great as those he dispenses on all around him !

I was a very frequent visitor of the admirable institution, the Medical Society of Stockholm. The members meet weekly in their extensive library, where all the best authors are to be found, and most of the modern periodical publications from all parts of Europe are regularly received. Different individuals present papers for discussion, generally upon subjects best adapted to excite variety of opinion. The dissertations always met with that candid and generous reception so worthy the liberal and truly noble Professors of the science of nature. The unfettered mind was allowed to range through the fields of knowledge; to gather the varied produce, and offer it for the public good. The different opinions

were received with true urbanity of manner; but with that sense of liberty which distinguishes the Swede, and which he feels is his birthright. It was with great regret I found my very imperfect acquaintance with the Swedish language would not allow me to do justice to the information thus offered. For though, through the attention of my friends, I was always enabled to comprehend the paper, and the general scope of the observations it drew forth, still I lost much that was valuable. Deeply feeling the kindness I experienced, I had an anxious wish to offer my quota of information to the members, that I might show I was neither insensible of their attentions, nor of the value of the objects for which they were assembled. The only language in which I could be generally understood is the one in which I had the honour to address them, and which

once was considered as the medium of communication, and of the diffusion of science amongst those who cultivated and admired it.

The shortness of time allotted for the reading each paper, has prevented my entering upon any subject that might trespass too much upon them. I have, therefore, merely prefaced some extracts from Servetus, by an expression of the admiration I cannot but entertain for the zeal and enthusiasm which are felt for the art of medicine in Stockholm. To have entered at all upon the consideration of the theories which have been advanced by the singular author whom I have quoted, would have demanded more time than could be allotted: I have given them merely as subjects for discussion. Possessing a copy of that most rare work of Ser-

vetus, the "Christianismi Restitutio," I wished to print the extracts that relate to Physiology, in a correct and ungarbled form. Dr. Wotton, Mr. de la Roche, Niceron, Chauffepie, have all quoted the passages either to suit their own views, or to show merely the author's knowledge upon the circulation of the blood. I have quoted the whole of the theories verbatim. Those that relate to the phænomena of mind, as produced by the brain, will at this time have an additional interest, when Gall and Spurzheim have attracted the attention of philosophers to the subject. With some degree of boldness he has fixed upon the ventricles of the brain, and the choroid plexus, as the seat of that ray divine which an immortal Creator has shed upon man, and man alone. The awe and veneration with which such a subject must be approached, are increased by

the conviction that though we may flatter our fond hopes with the idea that some knowledge has been gained, we are still lost in the same labyrinth of doubt and uncertainty that we ever were.

After giving his description of the passage of the blood from the right ventricle of the heart through the lungs, to the left ventricle of the heart, he gives his reasons for his belief in his doctrine of the circulation, and observes that Galen was unacquainted with the truth. He then commences that most extraordinary passage upon the seat of the mind. The blood, he supposes, having received in its passage through the lungs the breath of life, is sent by the left ventricle into the arteries; the purest part ascends to the base of the brain, where it is more refined, especially in the retiform plexus. It

is still more perfected in the small vessels, the capillary arteries, and the choroid plexus, which penetrate every part of the brain, enter into the ventricles, and closely surround the origin of the nerves. From the vital spirit it is now changed into the animal spirit, and acts upon the mass of brain which is incapable of reasoning without this stimulus. In the two ventricles of the brain is placed the power of receiving impressions from external objects; in the third is that of reasoning upon them; in the fourth is that of remembering them. From the communication through the foramina of the ethmoid bone, the two ventricles receive a portion of external air to refresh the spirit, and to give new animation to the soul. If these ventricles are oppressed by the introduction of noxious vapour, epilepsy is produced; if a fluid presses on the choroid plexus, apo-

plexy; and whatever affects this part of the brain causes loss of mental power.

I have transcribed his notions on vegetable and animal life: they are more curious than correct. They are contained in the second dialogue on the Trinity, which is remarkable from its being the best proof that the doctrines of Servetus were completely at variance with the Unitarianism of which he was accused. It is a dialogue between Peter and Michael, "modum generationis Christi docens, quod ipse non sit creatura, nec finitæ potentiæ, sed vere adorandus, verusque Deus."

He here enters very minutely into the soul as the breath of life; and the whole of the theories he has advanced, are in support of the passages in the Bible, relative to

the Almighty pouring into the nostrils of man the breath of life. A long metaphysical and theological discussion, difficult to be understood, follows; but not one syllable can be found contrary to the precepts of Christianity, or to the pure faith he wished to instil into the mind. In another part of the work there is a dissertation upon the heart as the origin of faith, which he believes, on the authorities he cites from the Bible, to be the seat of some degree of mental power. The heart, he supposes, deliberates upon the will, but the will obeys the brain. Another of his theories—The life is in the blood, has been the subject of much discussion, among the friends and the opponents of John Hunter. There certainly is a very great obscurity in all the opinions that Servetus advanced: they are so blended with his religious notions, that they are sometimes

rendered almost unintelligible; still we perceive an original mode of thinking pervades each idea; and much material for reasoning is constantly presented to us: and when we remember that this extraordinary man gave the world the first clear description of the circulation of the blood, seventy years before our immortal Harvey published the result of his inquiries, it is but justice that his other theories, which have been almost unknown, should again be brought forward.—These passages I have given in the original, and shall avoid all other comment upon them, further than to observe, that all that has been advanced by him is singular and interesting; that he was a sincere believer, a devout man; that he had read the Scriptures, admired the doctrines they taught, but wished to exert his own reason to interpret them. That reason was too speculative, and

fond of yielding to the wildness of his imagination; whilst the enthusiastic and ardent temper of his mind would not allow him to abandon his opinions, when he was opposed by the hand of power and threatened with the punishment of death.

Of his religious opinions I have but little to say: the bitter prejudices, the violent hatred, the unmanly persecutions that disgraced the early introduction of a reformed religion, have fortunately given place to the milder charities of true Christianity. The penalty of death, by the most cruel torture, would not now be inflicted on a man who offered to the world crude and undigested dreams, or the visionary fancies of a disturbed imagination; and these, to say the very worst, are the sins for which Servetus expired at the stake, surrounded by the

books his ardent and unconquerable spirit had dared to compose.

A sincere love of Christianity beams forth in every page of the work I have before me. His great anxiety was to restore religion to that purity, which he believed it to have lost. The doctrine he opposed was not that of Christ; it was that of the churchmen who had established, in his name, their own vain and fleeting opinions. The best proof that Calvin and Melancthon had deserted the mild, the charitable, the peaceful religion of truth, and that they followed not the divine precepts of their gentle Master, was, and is, that they pursued, even unto death, a helpless, poor, and learned man. His life, and all connected with his hapless fate, have often been the subject of the pens of learned and ingenious men. A few have done him

justice, whilst others have heaped upon his name either calumny or contempt. The article in the Historical Dictionary by M. de Chauffepie, called the Life of Servetus, has been the source of most of the accounts that have been written: his prejudices against him are violent, and certainly unwarranted by the authorities he cites; and even the quotations have but one end, not that of gaining truth, but proving the absurdity and extravagance of opinions, some of which have since received the sanction of experiment and reason. The second volume of the Bibliothèque Angloise contains a very interesting Life of Servetus, and in the first volume are the extracts relating to the circulation, taken from Douglas. It is ascribed to Monsieur de la Roche. But it was Monsieur d'Artigny, in the Memoires des Hommes Illustres, who extracted the history of the

trial from the archives of the Archbishoprick of Vienne in Dauphine.

I have lately read with considerable pleasure, an Apology for the Life of Servetus, by Richard Wright; not because he adds any thing to our previous knowledge of his life and conduct, but that a spirit of candour and liberality entitles the volume to much consideration. He has evidently not met with the Christianismi Restitutio; nor does he clearly state the religious notions of Servetus; that, I am most willing to confess, is a task of no small difficulty. At some future time, when less immersed in the occupations of life, I hope to be able to give some observations upon physiology, which may have a greater claim to the general attention, than the little dissertation I have,

under the peculiar circumstances, the pleasure to offer.

The late Dr. Sims, for many years President of the Medical Society of London, bequeathed to me his copy of Servetus, to which he has prefixed the following note:

"The fate of this work has been not a little singular; all the copies, except one, were burned along with the author, by the implacable Calvin. This copy was secreted and saved by D. Colladon, one of the judges. After passing through the library of the Landgrave of Hesse-Cassel, it came into the hands of Dr. Mead, who endeavoured to give a quarto edition of it; but before it was nearly completed, it was seized by John

Kent, messenger of the press, and William Squire, messenger in ordinary, on the 27th of May, 1723, at the instance of Dr. Gibson, Bishop of London, and burnt, a very few copies excepted. The late Duke de Valliere gave near 400 guineas for this copy, and at his sale it brought 3810 livres. It contains the first account of the circulation of the blood, above 70 years before the immortal Harvey published his discovery."

In justice to the memory of my late valued friend, I must state my conviction that this copy is not the original one; at the same time, I firmly believe he imagined it to be that which he has described. Yet he was well known as an accurate man, as a judicious collector of books: and, indeed, to him is the Medical Society of London indebted for its valuable and admirable library.

DISSERTATIO,

QUÆDAM DE

SERVETO

COMPLECTENS,

QUAM

SOCIETATI MEDICÆ APUD STOCKHOLM

SUBJICIT

GEORGIUS SIGMOND, M.D.

OLIM È JES. COLL. APUD CANTABRIGIAM,
NECNON PRÆSES REGIÆ PHYSICÆ SOCIETATIS APUD
EDINBURGENAM.

DISSERTATIO,

QUÆDAM DE

SERVETO

COMPLECTENS.

Mihi multùm cogitanti, quâ in re, quóve modo pro multis beneficiis à me acceptis, de medicis scientiarumque professoribus, dum vestrâ in urbe moratus sum, dignas agere gratias, optimè possem, nihil jucundius occurrebat quàm ut sententiam meam de progressu illæ medicæ artis, vestro studio atque auctoritate darem.

Quum ingenuas artes et disciplinam, quæ vitam feliciorem reddant, et sanitatem cor-

poris mentisque tueantur, ita diligentissimè et accuratissimè exploratas, summis ornatissimisque viris video, dulce est, hoc in concursu hominum literatissimorum, laudis testimonium afferre. Brevi in temporis spatio, scientia nostra incredibili motu, atque celeritate et impetu quasi novo, vestrâ in civitate sese longè lateque diffudit; Natura duce, ejus ex fontibus, potiùs quàm rivulis haurientes, ad veritatem inveniendam multùm, ad mentem excitandam satis fecistis. Falsæ opiniones et superstitiones pœne aniles evanuerunt, castissima veritas, plenaque fides quæruntur. Auctoritas majorum, et verba magistri nihil inter vos valent, nisi ratione et observatione diuturnâ confirmata. Vobis optimè cognitum est, quærendam esse semper illam scientiam, non quæ vestigia Naturæ relinqueret, sed quæ sequeretur.

Illa enim motu quodam utitur certo et æquali, simplicitate gaudet, functiones vitæ sponte sua conservat, alit, auget, sustinet; morbos, ægritudines, molestias, levat, minuit, et corrigit. In illâ nihil est malum, nihil incertum, nihil fortuitum; et quamvis nosmetipsi quæ varia, et non consentanea videantur, haud satis intelleximus; tamen inter sese diuturna experientia omnia optimè cohærere docet. Legibus illius bene cognitis, levamur errore, temeritate removemur, ignoratione rerum non conturbamur.

Vestrâ in urbe institutiones antiquissimas admodum ægris accommodatas, iterum vestrâ curâ atque diligentiâ renovatas, vidi. Mundities exquisitissima semper invenienda fuit, dum labor assiduus, et ars illa pœne divina, morbis occurrebant: nec mores benigni, neque humanitas gratissima, deerant.

Mihi etiam multum gaudii afferebat vidisse juniores ad cubicula ægrotantium adstetisse, dum medicus, quidquid de natura morbi cogitavit, in publica commoda protulisset. Perspicuum enim est talem consuetudinem ad veritatem inveniendam, mentem paratiorem reddere. Jucundum fuit, tam multa conquisita, et collecta ad Chirurgiam et Anatomiam exponendam, observare. Hisce collectionibus nihil utilius, nihil aptius, materiam vero, et copiam scientiæ augere, ex quibus demonstratio, cur quæque causa morborum fiat, et quid sit iter naturæ, quæque progressio.

Hâc in terrâ viri optimis artibus imbuti, vobis præclarissima exempla tradiderunt, inter quos Linnæus; illi vivida vis animi,

"Confringere ut arcta
Naturæ primus portarum claustra cupiret."

Sunt et vobis alia vetustorum nomina, quorum famam ulla nunquam delebit oblivio: illorum sententiæ iterum iterumque novis scriptoribus repetitæ, pro lege hodie tenentur. Certissime haud multi sunt, apud antiquiores, qui multa de arte practicâ reliquerunt: difficillimum forsan est alicui apud ægros peritiam assidue exercenti, tempore ita posse uti, ut labores ejus scriptis tradat. Sed hodie multum ad Chemiam, ad Botanicen, et quæ Medicinæ auxilia habeantur, tenetis, nec deficit liber alter aureus, de cognoscendis et curandis morbis, et spero vestro numine atque consilio, fructus novos uberes, diuturnosque capiemus. Sunt vobis nomina hodie pro patriæ famâ repetenda. Quem enim quisquam potest ex omni memoria sumere, magis illustrem, magis laude dignum, Berzelio. Illi universus consensus omnium sapientum, æternum laudum testimonium concessit, et

illum "in numero qui semper apud omnes sancti sunt, habiti atque docti," collocavit. Pergite ab iisdem principiis quibus scientissimè profecti estis, veritatem invenietis, re nulla impediamini. Tota nostra scientia "frugifera et fructuosa est, nec ulla pars ejus inculta ac deserta sit." Rationis perfectio est Naturæ cognitio.

"Veteres quidem philosophi in beatorum insulis fingunt qualis natura sit vitæ sapientum, quos curâ omni liberatos, nullum necessarium vitæ cultum, aut paratum requirentes, nihil aliud esse acturos putant, nisi ut omne tempus in quærendo ac discendo in naturæ cognitione consumunt; nos autem, non solum beatæ vitæ istam oblectationem videmus, sed etiam levamentum miseriarum."—*Cicero de Finibus Bon. et Mal.*

Multæ res in physiologiâ perdifficiles, et perobscuræ sunt, et etiam nunc in tenebris Cimmeriis reconditæ. Philosophi, et hi quidem docti, et præstantissimi, sententias quæ ad hanc cognitionem multùm prosunt literis nuperrime mandaverunt. Quasi speculatores venatoresque veritatis, totam hominis fabricationem quæsiverunt, et unde sensus sese habeant ita mirificè ad usus vitæ accommodatos, postulaverunt. Multa de cerebro viri admodum sapientes protulerunt; sed scripta Serveti, illis haud bene cognita, sententias multâ observatione dignas continent. Illum descripsisse circuitum sanguinis, circiter septuaginta annos antequam noster Harveius tantam sibi gloriam vindicavit, haud ignotum est, sed opiniones aliæ in tenebris latent; illi tamen magna fuit ubertas ingenii, et multa cogitandi copia. Pleris haud notissimum est illum dixisse " ventriculorum cere-

bri spatia inania, quæ philosophi et medici admirantur, nihil minus continere quàm animam," et animam esse in sanguine, et " anima ipsa sanguis."

Quando fatum ejus miserrimum in mente revocemus, " quis talia fando temperet à lacrymis ?" Illo die, ducebatur illum impia nos rationis inire elementa; sed quis hasce preces legens, sanctitatem fidémve dubitet? " O Christe Jesu! Filî Dei, qui de cœlo nobis datus, deitatem patefactam in te ipso visibilem manifestas, teipsum aperi servo tuo, ut manifestatio tanta vere patefiat. Spiritum tuum bonum et verbum efficax petenti nunc tribue, mentem meam et calamum dirige, ut divinitatis tuæ gloriam possim enarrare, ac veram de te fidem exprimere. Causa hæc tua est, et tuam a Patre, et Spiritus tui gloriam explicans, quæ divino quodam impulsu

tractanda sese mihi obtulit, cum de tua veritate solicitus tractare aliquando cæpi, et nunc iterum tractare cogor, quia completum est vere tempus, ut ex rei ipsius certitudine et ex signis temporum manifestis sum nunc piis omnibus ostensurus. Lucernam non esse abscondendam tu nos docuisti, ut væ mihi sit nisi evangelizem! Causa communis Christianis omnibus agitur, cui omnes tenemur. Superest, lector, ut te pro Christo benevolum usque ad finem exhibeas, et rem totam audies sermone veritatis absque aliquo foco."

Timeo ne in aliis scriptis paulò intemperantior fuisset quàm debuisset, sed in libro de quo hasce preces, quasi divinas, tradidi, nihil est quod non honestissimum, quod non spectatissimum, quod non sanctissimum. Haud ignarus quidem certe, et imprudens impendentium tantorum inimicorum, et hos-

tium infestissimorum fuit, quando in publicum sententias proferre ausus est. Sed tanta scelera, tantasve iras, animis religioni miti, benignæ, beatæque deditis inesse, dicere quis potest, aut cogitare quis vult?

Calvin, Religionis quanquam cultor et amantissimus, ita vehemens feroxque naturâ sese præbuit, ut non putavisset fas esse sententiam in animo hærere, nec ex ore cujusquam exire, quod non menti suæ aptè consentiret, quod non ad aures suas jucundè veniret. Ille quamvis in maximo cursu ac fluctibus belli propter fidem emersus est, tamen sese aliis infestissimus et acerbissimus ostendebat. Et, eheu! illi "tanta potuit religio suadere malorum," ut Servetus ille egregius, nihil vero peccans, nihil contra bonos mores, nihil contra consuetudinem civilem, nihil denique contra Christianismi

fidem dilectissimam moliens, non solùm in carcerem, non solùm ad supplicium, non solùm ad mortem, sed imo etiam ad cruciatum! ad ignem duceretur! Si hoc fuit justum, "Quæ potest esse pietas? quæ sanctitas? quæ religio?"

Mihi quidem Vesalium primum omnium circuitum sanguinis intellexisse, Servetum designavisse, videtur. Haud mihi necessarium est hodie in arenâ descendere de Hippocratis scientiâ disserere. Certissimè illum et suos discipulos hasce res intellixisse, Vanderlinden docuit; sed Pitcairn in libro cui nomen "Problema de Inventoribus," et Wotton in scriptis "de doctrina Antiquorum et Recentium," omnia de hâc sententiâ prædicaverunt. Mihi sæpenumero perlegenti illud opus pœne divinum Ciceronis "De Natura Deorum," mi-

rum esse videtur neminem unquam illius opiniones protulisse. Certissime ille admodum in omni genere Philosophiæ versatus fuit; et haud dubitandum est illum nobis dedisse præcepta de Physiologia, quæ doctrina illius temporis præscripserit: observationes ejus igitur adjungam.

"In pulmonibus autem inest raritas quædam, et assimilis spongiis mollitudo, ad hauriendum spiritum aptissima: qui tum se contrahunt adspirantes, tum respiritu dilatant, ut frequenter ducatur cibus animalis, quo maxime aluntur animantes. Ex intestinis autem, et alvo secretus a reliquo cibo succus is, quo alimur, permanat ad jecur, per quasdam a medio intestino usque ad portas jecoris, (sic enim appellant) ductas et directas vias, quæ pertinent ad jecur, eique adhærent. Atque inde aliæ pertinentes sunt, per quas

cadit cibus a jecore delapsus. Ab eo cibo cum est secreta bilis, iique humores, qui ex renibus profunduntur: reliqua se in sanguinem vertunt, ad easdemque portas jecoris confluunt, ad quas omnes ejus viæ pertinent: per quas lapsus cibus, in hoc ipso loco in eam venam, quæ cava appellatur, confunditur, perque eam ad cor confectus jam coctusque perlabitur: a corde autem in totum corpus distribuitur per venas admodum multas, in omnes partes corporis pertinentes. Quemadmodum autem reliquiæ cibi depellantur tum adstringentibus se intestinis, tum relaxantibus, haud sane difficile dictu est: sed tamen prætereundum est, ne quid habeat injucunditatis oratio. Illa potius explicetur incredibilis fabrica naturæ. Nam quæ spiritu in pulmones anima ducitur, ea calescit primum ab eo spiritu, deinde contagione pulmonum: ex eaque pars redditur respirando, pars concipitur cor-

dis parte quadam, quem ventriculum cordis appellant: cui similis alter adjunctus est, in quem sanguis a jecore per venam illam cavam influit. Eoque modo ex his partibus et sanguis per venas in omne corpus diffunditur, et spiritus per arterias. Utræque autem crebræ multæque toto corpore intextæ vim quandam incredibilem artificiosi operis divinique testantur. Quid dicam de ossibus? quæ subjecta corpori, mirabiles commissuras habent, et ad stabilitatem aptas, et ad artus finiendos accommodatas, et ad motum, et ad omnem corporis actionem. Huc adde nervos, a quibus artus continentur; eorumque implicationem toto corpore pertinentem: qui, sicut venæ et arteriæ, à corde tracti, et profecti, in corpus omne ducuntur."

Hæc, ut ego arbitror, veteres harum rerum nihil verum cognovisse probant; quod qui-

dem Cicero his etiam observationibus docet, nostra experientia falsum esse monstrat. Quæ ex Galeno collecta sunt, etiam inania, falsa, et vana videntur. Multa autem acuta et copiosa in sexto libro operis Vesalii de fabrica humani corporis invenienda sunt. Nunc ad sententias Serveto proprias veniam. Equidem satis admirari non possum opiniones sibi proprias quas nobis dedit: certissime multæ sunt ambiguæ, et subtilissimæ; tamen omnia vestrâ observatione digna sunt, quæ aliquid ad veritatem inveniendam præbeant. Igiturque vobis ipsissima verba proferam.

" Ut vero totam animæ et spiritus rationem habeas, lector, divinam hic philosophiam adjungam, quam facile intelliges, si in anatome fueris exercitatus. Dicitur in nobis ex trium superiorum elementorum substantia

esse spiritus triplex, naturalis, vitalis et animalis. Tres spiritus vocat Aphrodisæus. Vere non sunt tres, sed denuo spiritus distincti. Vitalis est spiritus, qui per anastomoses ab arteriis communicatur venis, in quibus dicitur naturalis. Primus ergo est sanguis, cujus sedes est in hepate, et corporis venis. Secundus est spiritus vitalis, cujus sedes est in corde, et corporis arteriis. Tertius est spiritus animalis, quasi lucis radius, cujus sedes est in cerebro, et corporis nervis. In his omnibus est unius spiritus et lucis Dei energia. Quod a corde communicetur hepati spiritus ille naturalis, docet hominis formatio ab utero. Nam arteria mittitur juncta venæ per ipsius fœtus umbilicum: itidemque in nobis postea semper junguntur arteria et vena. In cor est prius, quam in hepar, a Deo inspirata Adæ anima, et ab eo hepati communicata. Per inspirationem in

os et nares, est vere inducta anima: inspiratio autem ad cor tendit. Cor est primum vivens, fons caloris in medio corpore. Ab hepate sumit liquorem vitæ, quasi materiam, et eum vice versa vivificat: sicut aquæ liquor superioribus elementis materiam suppeditat, et ab eis, juncta luce, ad vegetandum vivificatur. Ex hepatis sanguine est animæ materia, per elaborationem mirabilem, quam nunc audies. Hinc dicitur anima esse in sanguine, et anima ipsa esse sanguis, sive sanguineus spiritus. Non dicitur anima principaliter esse in parietibus cordis, aut in corpore ipso cerebri, aut hepatis, sed in sanguine, ut docet ipse Deus, Genes. 9. Levit. 17. et Deut. 12.

"Ad quam rem est prius intelligenda substantialis generatio ipsius vitalis spiritus, qui ex aëre inspirato, et subtilissimo sanguine

componitur, et nutritur. Vitalis spiritus in sinistro cordis ventriculo suam originem habet, juvantibus maxime pulmonibus ad ipsius generationem. Est spiritus tenuis, caloris vi elaboratus, flavo colore, ignea potentia, ut sit quasi ex puriori sanguine lucidus vapor, substantiam in se continens aquæ, aëris, et ignis. Generatur ex facta in pulmonibus mixtione inspirati aëris cum elaborato subtili sanguine, quem dexter ventriculus cordis sinistro communicat. Fit autem communicatio hæc non per parietem cordis medium, ut vulgo creditur, sed magno artificio a dextro cordis ventriculo, longo per pulmones ductu, agitatur sanguis subtilis: a pulmonibus præparatur, flavus efficitur: et a vena arteriosa, in arteriam venosam transfunditur. Deinde in ipsa arteria venosa inspirato aëri miscetur, exspiratione a fuligine repurgatur. Atque ita tandem a sinistro

cordis ventriculo totum mixtum per diastolem attrahitur, apta supellex, ut fiat spiritus vitalis.

" Quod ita per pulmones fiat communicatio, et præparatio, docet conjunctio varia, et communicatio venæ arteriosæ cum arteria venosa in pulmonibus. Confirmat hoc magnitudo insignis venæ arteriosæ, quæ nec talis, nec tanta facta esset, nec tantam a corde ipso vim purissimi sanguinis in pulmones emitteret, ob solum eorum nutrimentum, nec cor pulmonibus hac ratione serviret: cum præsertim antea in embryone solerent pulmones ipsi aliunde nutriri, ob membranulas illas, seu valvulas cordis, usque ad horam nativitatis nondum apertas, ut docet Galenus. Ergo ad alium usum effunditur sanguis a corde in pulmones hora ipsa nativitatis, et tam copiosus. Item a pulmonibus ad

cor non simplex aër, sed mixtus sanguine mittitur, per arteriam venosam: ergo in pulmonibus fit mixtio. Flavus ille color a pulmonibus datur sanguini spirituoso, non a corde. In sinistro cordis ventriculo non est locus capax tantæ, et tam copiosæ mixtionis, nec ad flavum elaboratio illa sufficiens. Demum, paries ille medius, cum sit vasorum et facultatum expers, non est aptus ad communicationem et elaborationem illam, licet aliquid resudare possit. Eodem artificio, quo in hepate fit transfusio a vena porta ad venam cavam propter sanguinem, fit etiam in pulmone transfusio a vena arteriosa ad arteriam venosam propter spiritum. Si quis hæc conferat cum iis, quæ scribit Galenus, lib. 6. et 7. de usu partium, veritatem penitus intelliget, ab ipso Galeno non animadversam.

" Ille itaque spiritus vitalis, a sinistro cordis ventriculo, in arterias totius corporis deinde transfunditur, ita ut qui tenuior est, superiora petat, ubi magis adhuc elaboratur, præcipue in plexu retiformi, sub basi cerebri sito, in quo ex vitali fieri incipit animalis, ad propriam rationalis animæ sedem accedens. Iterum ille fortius mentis ignea vi tenuatur, elaboratur, et perficitur, in tenuissimis vasis, seu capillaribus arteriis, quæ in plexibus choroidibus sitæ sunt, et ipsissimam mentem continent. Hi plexus intima omnia cerebri penetrant, et ipsos cerebri ventriculos interne succingunt, vasa illa secum complicata, et contexta servantes, usque ad nervorum origines, ut in eos sentiendi et movendi facultas inducatur. Vasa illa miraculo magno tenuissime contexta, tametsi arteriæ dicantur, sunt tamen fines arteriarum, tendentes ad ori-

ginem nervorum, ministerio meningum. Est novum quoddam genus vasorum. Nam sicut in tranfusione a venis in arterias, est in pulmone novum genus vasorum, ex vena et arteria: ita in transfusione ab arteriis in nervos est novum quoddam genus vasorum ex arteriæ tunica in meninge; cum præsertim meninges ipsæ suas in nervis tunicas servent. Sensus nervorum non est in molli illa eorum materia, sicut in cerebro. Nervi omnes in membranarum filamenta desinunt, exquisitissimum sensum habentia, ad quæ ob id semper spiritus mittitur. Ab illis itaque meningum seu choroidum vasculis, velut a fonte, lucidus animalis spiritus veluti radius per nervos effunditur in oculos, et alia sensoria organa. Via eadem, vice versa, advenientes extrinsecus sensatarum rerum lucidæ imagines, ad fontem eundem mittuntur, quasi per lucidum medium intro penetrantes.

"Ex his satis constat, mollem illam cerebri massam non proprie esse rationalis animæ sedem, cum frigida sit et sensûs expers. Sed esse veluti pulvinum dictorum vasorum, ne rumpantur: et custodem animalis spiritus, ne diffletur, quando nervis est communicandus: et esse frigidam ad contemperandum igneum illum intra vasa contentum calorem. Hinc quoque fit, ut prædictis vasis communem membranæ tunicam in interna cavitate servent nervi ad fidam spiritus custodiam: idque à tenui meninge, sicut et externam aliam tunicam habent à crassa. Illa etiam ventriculorum cerebri spatia inania, quæ philosophi, et medici admirantur, nihil minus continent, quàm animam. Sed prima ratione facti sunt ventriculi illi ad expurgamenta cerebri recipienda, veluti cloacæ, ut probant excrementa ibi recepta, et meatus ad palatum et nares, à quibus defluxiones morbosæ nas-

cuntur. Et quando ventriculi ita opplentur pituita, ut arteriæ ipsæ choroidis ea immergantur, tunc subito generatur apoplexia. Si partem obstruat noxius humor, cujus vapor mentem inficiat, generatur epilepsia, aut morbus alius, juxta partem, in quam ille expulsus decumbet. Ibi ergo dicemus esse mentem, ubi eam affici manifeste percipimus. Ex immoderato illorum vasorum fervore, aut meningum inflammatione, fiunt manifesta deliria et phrenitides. Unde ex accidentibus morbis ex sitûs et substantiæ ratione, ex caloris vi, et eum continentium vasorum artificiosa pulchritudine, et ex ibi apparentibus animæ actionibus, semper colligimus, esse vascula illa præferenda, et quia eis reliqua omnia serviunt: et quia sensuum nervi eis alligantur, ut inde vim accipiant. Postremo quia nos ibi laborantem intellectum percipimus, in forti meditatione arteriis

illis usque ad tempora pulsantibus. Vix intelliget, qui locum non viderit. Secunda alia ratione facti sunt ventriculi illi, ut ad spatia eorum inania penetrans per ossa ethmoide inspirati aëris portio, et ab ipsis animæ vasis per diastolem attracta, animalem intus contentum spiritum reficiat, et animam ventillet. In vasis illis est mens, anima, et igneus spiritus, jugi flabellatione indigens: alioquin instar externi ignis conclusus suffocaretur. Flabellatione et difflatione, instar ignis, indiget non solum, ut ab aëre pabulum sumat, sed ut in eum suam fuliginem evomat. Sicut elementaris hic externus ignis, terreo crasso corpori, ob communem siccitatem, et ob communem lucis formam, alligatur, corporis liquorem pabulum habens, et ab aëre difflatur, fovetur, et nutritur: ita igneus ille noster spiritus et anima, corpori similiter alligatur, unum cum eo faciens ejus

sanguinem pabulum habens: et ab aëreo spiritu inspiratione et exspiratione difflatur, fovetur, et nutritur, ut sit ei duplex alimentum spirituale et corporale. Hac loci et spiritualis fomenti ratione conveniens admodum fuit, eundem nostri spiritûs lucidum natura locum spiritu alio sancto, cælesti, lucido, afflari, idque, per oris Christi exspirationem, sicut à nobis inspiratione in eundem locum trahitur spiritus. Decuit eundem nostri intellectûs et lucentis animæ locum, cælesti alterius ignis luce denuo illuminari. Nam Deus primam in nobis lucernam illuminat, et subortas ibi tenebras denuo vertit in lucem, ut ait David psalm. 17. et 2 Sam. 22. Idipsum docet Elihu apud Job cap. 32. et 33. Idipsum docuerunt Zoroaster, Trismegistus et Pythagoras, ut mox citabo. Vasorum quoque formatio et temperies bona ad mentis bonitatem facit, ut illis sit anima me-

lior, quibus sunt illa melius disposita. Sicut vero à bono spiritu insita illa lux magis et magis illuminatur, ita et a malo obscuratur. Si in vascula illa cerebri, cum animali nostro lucido spiritu, tenebrosus et nequam spiritus intrudatur, tunc dæmoniacos furores videbis, sicut per bonum spiritum lucidas revelationes. Vascula autem illa facile impetit spiritus nequam, qui sedem habet vicinam in abyssis illis aquarum et lacunis ventriculorum cerebri. Spiritus ille nequam, cujus potestas est aëris, una cum inspirato à nobis aëre lacunas illas libere ingreditur et egreditur, ut ibi cum spiritu nostro, intra vasa illa, velut in arce collocato, jugiter dimicet. Imo eum ita undique obsidet, ut vix illi liceat respirare, nisi quando superveniens lux spiritûs Dei malum spiritum fugat. Ecce quam decenter loco illi conveniat, mentis, spiritus, revelationis, et intellectûs ratio, et

insita et superveniens, et tentationum superiorum pugna, ut alias nunc tentationes omittam. Simili inspirationis ratione charitas Dei in corde per spiritum sanctum accenditur. In corde, ultra vitæ principium, est voluntatis imperium, et post tentationes intellectûs, ac carnis stimulos, prima peccati origo, ex consensu Matth. 15. Sed ea, quæ in cerebro sunt, absolvamus, priusquam ad cor progrediamur. Variæ pro illorum cerebri vasorum diversitate sunt mentis actiones, quemadmodum sunt varia organa in variis ventriculis, quos nunc ita expono.

" Animali illi, et igneo spiritui, in illis choroidis vasculis contento, communicatur inspiratus aër parte exigua, per ossa dicta ethmoide, tendens ad priores duos cerebri ventriculos, in syncipitis dextra et sinistra constitutos. Ibique capillares illæ choroidis ar-

teriæ aërem illum dilatatæ hauriunt, ad ventillandam animam. Ad easdem etiam nervi duo optici, concursu facto, visorum lucidas imagines deferunt, sicut et auditorii et aliorum sensuum nervi, tegumento communis membranæ semper servato, ad fidissimam et tutissimam omnium custodiam. Si enim in spatiis illis inanibus, vagarentur species et spiritus cum anima, emungendo foras omnia emitterentur, aut saltem per sternutationem. Si ibi esset anima, jam non esset in sanguine, cum sanguis non sit extra vasa. In vasis ergo choroidum est mens tutissime sita. Tutissimum est tegumentum: et ad dicta vasa, parte quadam in prioribus ventriculis sita, tendunt sensorii principes nervi, ut sit ibi initium sensûs communis, exteriorum sensuum in commune lata apprehensio, seu imaginatio, ut conferri invicem et commisceri apprehensa ibi incipiant.

" Ille deinde inspiratus in cerebrum aër à duobus ventriculis anterioribus fertur ad medium, sive ad meatum quendam communem, concursu sub psalloide facto, ubi lucidior et purior est mentis pars: quæ divinitus innata sibi idearum semina exerens, ex semel jam apprehensis imaginibus potest res novas similitudine quadam cogitare, sive componere, imaginata commiscere, ex aliis alia inferre, inter ea discernere et puram ipsam veritatem colligere, lustrante Deo. Minor est ibi ventriculus et excellentior intellectûs ratio: quia arteriæ choroidis sunt ibi copiosiores, quæ suum igneum spiritum diastole reficiunt, et communis sensus apprehensiones in ratiocinationem magis et magis luculentam adducunt, luce ea spiritali intro per vasa penetrante, et Deitate ipsa ibi refulgente. Spatium inane non tantum ibi est, quantum in aliis ventriculis, ut meatum

potius, quam ventriculum dixeris, seu longam et anfractuosam scrutinii viam. Quod factum sapienter est, ob scrutinii difficultatem. Minor ideo est ventriculus, quia ubi est purior, et lucidior mentis pars, non tot congeri debuerunt excrementa. Et quæ ibi generantur, in subjectam recta choanam facile dilabuntur, ne mentis lucernam extinguant, aut ei sint impedimento. Plura sunt ibi vasa circa conarium, plures arteriarum pulsus, potentior ibi mentis, et ignei spiritus actio. Nos quoque potentius ibi juxta tempora pulsare laborantem intellectum exterius et interius deprehendimus, ut hoc solo experimento, ad ipsum mentis locum manuducamur. Adde quod ei loco est propinquior sensus auditus, qui est sensus disciplinæ. Miraculum maximum est hæc hominis compositio. Multi et longi ibi anfractus, usque ad cerebellum, ut longo scrutinio anfrac-

tuosæ quæque res possint investigari, et tenebræ illuminari: adjuvantibus etiam, per comminiscendi facultatem, iis, quæ in memoria fuerant antea recondita. Ibi quoque a janitore scolicoide, et sinuosis glutiis cum intenditur cogitatio, retinetur quodammodo augeturque inspirati aëris fomentum, donec ab eo flabellatis et impetu pulsantibus omnibus mentis arteriis, sit scrutinium perfectum, et lucide omnia illustrata. Menti ergo, quæ ignea est, et lucis Dei particeps, apprime cohæret locus ille igneus, et jam parta notitia, quæ etiam lucis est radius, et luminosa quædam imago. Externæ etiam rerum sensibiles species in oculum missæ, luminosæ sunt, et ab objecto luminoso, seu lucis formam habente, per medium luminosum missæ. Unde et mens ipsa magis et magis illustratur.

"Non solum a visu, qui plures rerum differentias nobis ostendit, intellectus ornatur, sed et ab aliorum sensuum objectis, quæ omnia cum lucido nostro spiritu cognationem aliquam habent. Cognatio est ex omnium substantiali forma, quæ lux est, et ex spiritali ipso in singulis agendi modo. Sonus et odor instar spiritus sunt, instar spiritus percipiuntur, et instar spiritus in nobis agunt. Auditorum perceptio fit externo spiritu ad auris membranam feriente ipsum internum spiritum, in quo sita est lux animæ, et spiritalis harmoniæ concentus, diastole et systole ordinatus. Odoratorum similis est fere ratio. Quæ autem gustantur et tanguntur, quanquam corporea magis sint, tamen vires habent, ad immutandam animam aptas, illa per humiditatem, hæc per renixum: ex lucis item communi forma, ex ejus varia in spiritum

actione. Lucis ratione substantia hæc tota in animam agit, cum totius ideam in ea imprimit. Substantias ipsas nunc vident Sophistæ, qui antea docebant, nihil videri, nec in Deo, nec in nobis, nisi qualitates et fucatas larvas. At nos in Christo videntes substantialem lucem, in aliis quoque veræ lucis visionem prosequimur.

" Ab omnibus prædictis in medio ventriculo illustratis, ad quartum in parencephalide ventriculum, permittente janitore, spiritus ipse tendit, et luminosa conflata imago, in ipsius animæ lumine sita. Ibi vero velut in cerebri fundo, vasa illa suum memoriæ thesaurum tenaciter observant, et quæ sunt sensu, et ratiocinatione inventa, recondunt: non parietibus affixa, sed in ipsa animæ substantia, velut in materia quadam. Habet ibi anima retenti spiritus fortiora vasa, ne tam facile

memoria diffluat. Omitto quod ea via, per spinæ magnos nervos, motrix totius corporis facultas ad musculos mittatur, animali illo spiritu veluti radiante. Sunt itaque in cerebro ventriculi quatuor, et sensus interiores tres. Nam priores duo ventriculi sensum unum communem faciunt, imaginum receptorem. Media est cogitatio, et extrema memoria. Hæc de spiritali in cerebrum ducta portione, cerebri organis, atque potentiis.

" Parte illa majore inspiratus aër per tracheam arteriam ad pulmones ducitur, ut ab ipsis elaboratus ad arteriam venosam transeat, in qua flavo et subtili sanguini miscetur, ac magis elaboratur. Deinde totum mixtum a sinistro cordis ventriculo diastole attrahitur, in quo fortissima et vivifica ignis ibi contenti virtute, ad suam formam perficitur, et fit spiritus vitalis, multis in ea elabora-

tione expiratis fuliginosis recrementis. Hoc totum veluti materia est ipsius animæ. Ultra totum hoc mixtum, duo in anima supersunt: quid vivens spiratione creatum, aut in sua materia productum: et spiritus ipse, seu divinitas ipsa spirando insita, omnia unum, et anima una. Id medium, quod principaliter anima dicitur, halitus est et spiritus, utrinque cum spiritu essentialiter junctus. Substantia est ætherea, illi archetypæ superelementari, et huic quoque *inferiori similis*: naturalis anima una, vitalis et animalis. Ecce totam animæ rationem, et quare anima omnis carnis in sanguine sit, et anima ipsa sanguis sit, ut ait Deus. Nam afflante Deo, inspirata per os et nares, in cor et cerebrum ipsius Adæ, et natorum ejus, illa cælestis spiritus aura, sive idealis scintilla, et spiritali illi sanguineæ materiæ intus essentialiter juncta, facta est in ejus visceribus anima."

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E SECUNDO DIALOGO DE TRINITATE.

"PET. Quibus partibus magis assimilatur homo plantæ?

MICH. Sunt qui stirpis caput aiunt deorsum, et subterraneas radices esse veluti capillos. Alii cor plantæ vocant in medio stipite. At vero in plantis nec sunt cordis, nec cerebri facultates, nec motus, sed solius hepatis. Non sunt in eis arteriæ, nec nervi, sed nutritoriæ venæ. Sola est in stirpibus hepatis facultas, attractrix, nutrix, et ad certam metam auctrix. Venis ergo hepatis assimilatur homo plantæ. Radices arboris sunt venæ portæ, alimentum trahentes. Quibus in unum coëuntibus sequitur truncus duplex venæ cavæ, deinde rami. Instar hepatis est crassum illud, quod ad radicem plantæ vides, seu inter radicem et stipitem.

PET. Estne in hepate anima vegetativa, ut in plantis, qua vivit embryo?

MICH. In lingua sancta non dicitur anima, nisi ubi est respiratio. Ideo in plantis non dicimus animam aliquam. Nutrix et auctrix facultas sit specifica quadam vi innati caloris, cum insita ideæ divinitate. Ignis ita fere seipsum auget, attrahendo alimentum. Vita in plantis dicitur, non vita animæ, sed vitæ formalis illius caloris, ut in lucerna dicimus ignem vivere, seu extinctum esse. Quin et lapides et alia in re medica motricem vim habentia affirmant aliqui, non solum vivere, sed et senectutem, morbos et mortem pati: quod et vino accidere quotidie experimur.

PET. Non est ergo similis nobis embryonis anima aut vita, qua plantis assimilatur?

MICH. Non omnino cum non sit in eo anima propria. Embryo dicitur vivere vita vegetativa antequam Deus animam inspiret. Sed alia tunc est radicum arboris ratio. Nam

per umbilicum tendit alimentum ad hepar. Radices arboris non sunt tunc venæ portæ, sed quasi polypodum capillamenta, ad materni uteri acetabula, seu κοτυληδονες, ut vocat Hippocrates. Multa inde vascula in secundas se inserunt, ac in duo duplicata vasa coëunt, quæ per umbilicum fœtus ingrediuntur. Nascente puero acetabulorum vincula solvuntur, ablutione a chorii inquinamento mundantur, quasi nova arbor transplantata. Quæ mysteria in cælesti quoque nativitate videbis, quasi tunc nova arbor ablutione baptismi in Christum transplantetur, nova anima donetur, et novum cibum accipiat.

PET. Non est cor primum vivens, si per hepar vivit embryo vegetativa vita, antequam cor diastolis et systolis munere fungatur.

MICH. Non est illa omnino hepatis vita. Aliunde enim fovetur. Et quanquam esset

vita illa ex sola vi seminis, non est vita animæ. In utero fovetur embryo ab anima matris, ab ipso corde matris. Nam ab eo originem trahunt arteriæ, quæ *fœtum* ipsum per umbilicum ingrediuntur, et vitalem spiritum in eum infundunt. Hujus materni spiritus vitalis calor vivificus, una cum innata seminis potentia facit embryonem vivere vita vegetativa absque alia tunc anima. Cor ergo, si non omnino dicatur esse tempore primum vivens, est principaliter vivens, et primum vera anima vivens.

PET. Quando inspiratur a Deo vera hominis anima?

MICH. Quando incipit homo spirare, quando nascitur. In utero non est inspiratio, nec respiratio: nec propria anima vivit fœtus, sed anima matris, veluti pars matris, vitali quem diximus spiritu per umbilicares arterias immisso: in quibus contenti spiritus munus non cessat, donec nascitur homo.

Ergo ejus munere semper in utero vivit fœtus. Veluti ramus est tunc, qui per nativitem in arborem transplantatur. Hinc ad Deum ait propheta, In te projectus sum ab utero, nova ratione exinde tibi insitus, psal. 21. Per flatum Dei in animam vivificatur homo. Animæ substantia id facile docet, quam ostendimus esse respirationem, et flatum. In scriptura sancta seu Hebraica lingua, non aliter dicitur anima, Latine quoque nomen sumpsit anima ab eo, quod Græce dicitur *ανεμος*, ventus. A sacris non dissidet, quod Orpheus dixit, animam vento ferri, ingredi respiratione, ex aëre et cum aëre vivere. Idipsum ex Ezechiele et aliis est nobis jam ostensum. Faciendo animam facit Deus flatum. Esa. 57. Per spirationem est in os et nares Adæ anima immissa, et in ejus posteros ita immittitur, et spiratione servatur. Cum ergo fœtus in utero nec inspirationem nec respirationem habeat, ita nec animam

propriam habet. Quomodo esset anima in corde, si cor nec diastolem habet, nec systolem? Nec cor, nec pulmo ibi moventur. Valvulæ cordis, seu membranæ illæ ad orificia vasorum, non aperiuntur donec nascitur homo. Spiritus vitalis ibi nullus in corde generatur, sed est ille solus, qui a matre infunditur. Quomodo igitur esset ibi anima propria? Nullus est vitalis spiritus proprius, in quo sita esse possit, donec nascitur homo. Artificio magno fit tunc divinæ animæ spiratio, cordis apertio, et spiritalis sanguinis immissio. Astrorum quoque peritia id præclare docet. Nam hora nativitatis, juxta siderum talem vel talem positionem, talis vel talis sequitur anima. In totam vitam tunc imprimitur cælestis influxus, inclinationem, temperamentum, et reliquos animæ innatos mores inducens. Non proprie dicitur filius qui in utero est, quia vere homo non est. Spe quadam aut seminis præpara-

tione, dicitur filius, sicut tempore legis Christus erat filius. Tota lex est veluti mulier prægnans, vere nondum adepta filium.

PET. Antequam inspiretur anima, est in fœtu vis movens, quæ membranam rumpit.

MICH. Quidni? Pullus rumpit putamen ovi, antequam spiret. Plantæ variæ suo motu, et muros et saxa rumpunt, ut sibi viam aperiant."

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E LIBRO DE FIDE ET JUSTITIA.

" Cor ergo liberum est, quod credit, fidit, sperat, et diligit Christum. Cor est incredulum, diffidit, desperat et odit. Fides a corde radicem originis ducens, transit per intellectum et terminatur ad objectum, quod est ipse Christus. Ecce qualiter est fides cognitioni conjuncta, fides ex auditu, donum Dei et in corde.

" Superest quædam objectio physica, quam

contra Chrysippum prosequitur Galenus, in libris de placitis Hippocratis, et Platonis. Origo motus voluntarii videtur esse in cerebro, a quo procedunt nervi, et animales spiritus, in quibus est illa musculorum motrix, et spontanea facultas. Ibi etiam est mens et vis rationalis, ut multis ibi ostenditur: ergo non in corde. Respondeo, Externo ministerio et speculationi præficitur cerebrum. Expectatur tamen semper cordis imperium et consensus: cujus voluntas, ut per cerebri ministerium post ratiocinationes intellectus suum velle concludit, ita per cerebri ministerium se foras exerit. Animales illi spiritus originem habent, a vitalibus ex corde prodeuntibus, in quo est prima vitæ, et animæ origo. In maximis apprehensionibus, timoribus et doloribus, in corde maxime sentitur affectus, velut in principe loco. Ibi est animæ et spiritus capacior locus, quam in cerebri vasculis. Illud verum est, quod cordis

voluntas non ita imperat, ipsi intellectus rationi, quin ab ea etiam reprimatur.

"Princeps una animæ facultas est in cerebro, ratiocinatio intellectus, ad quam veluti difficilem, in sublimi specula sitam, magno ingenio sunt varia organa facta. Alia est in corde simplex facultas, deliberatio voluntatis. Non potest cor velle, nisi objectum ei intellectus ministret, quia voluntas non fertur in incognitum, sicut et de incognitis nulla est fides. Imperat cor intellectui, quia ad cordis imperium intellectus se operi accingit, et intellectus ratio voluntatem cordis refrenat. Intellectus ea, quæ sunt, vel apparent vera, persequitur: voluntas vero ea, quæ bona. Voluntas per intellectum et sensum in res ipsas eadem via extrorsum tendit, qua res illæ per sensum et intellectum ad se introrsum venerunt. Qua ratione dicitur vis illa volendi, et in intellectu esse, et in libero ipso singulorum sensuum motu:

cum præsertim sit anima una, volens, intelligens, et sentiens. Sensus proprie non est ipsa organi passio, sed passionis dignitio, quæ est in anima: ob idque ejus postea recordatur anima. Ad eundem modum velle et intelligere est proprie in anima, non in organis cordis aut cerebri: sed est in eis conjunctus quidam motus, sunt prima instrumenta, agentem ibi animam continentia, ob idque eis actio tribuitur. Sunt qui cordi solam tribuunt concupiscentiam malam et iracundiam. Sed illa est a serpente carni intruso, alliciente cor et voluntatem. Alioqui cor est natura sua deitatis particeps, et bene vult. Ex his omnibus, hoc in summa colligimus, a corde esse liberam voluntatem. Fidem in corde esse aut non simpliciter liberam, cum ad eam ratiocinatio vera intellectus exigatur, et spiritus sancti motus. Nunquam tamen datur fides, nisi volenti libero."

LONDON:
PRINTED BY S. AND R. BENTLEY, DORSET STREET.

Acme
Bookbinding Co., Inc.
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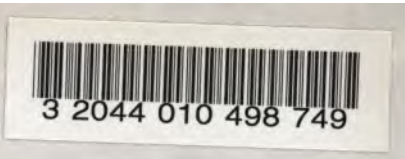
Charlestown, MA 02129



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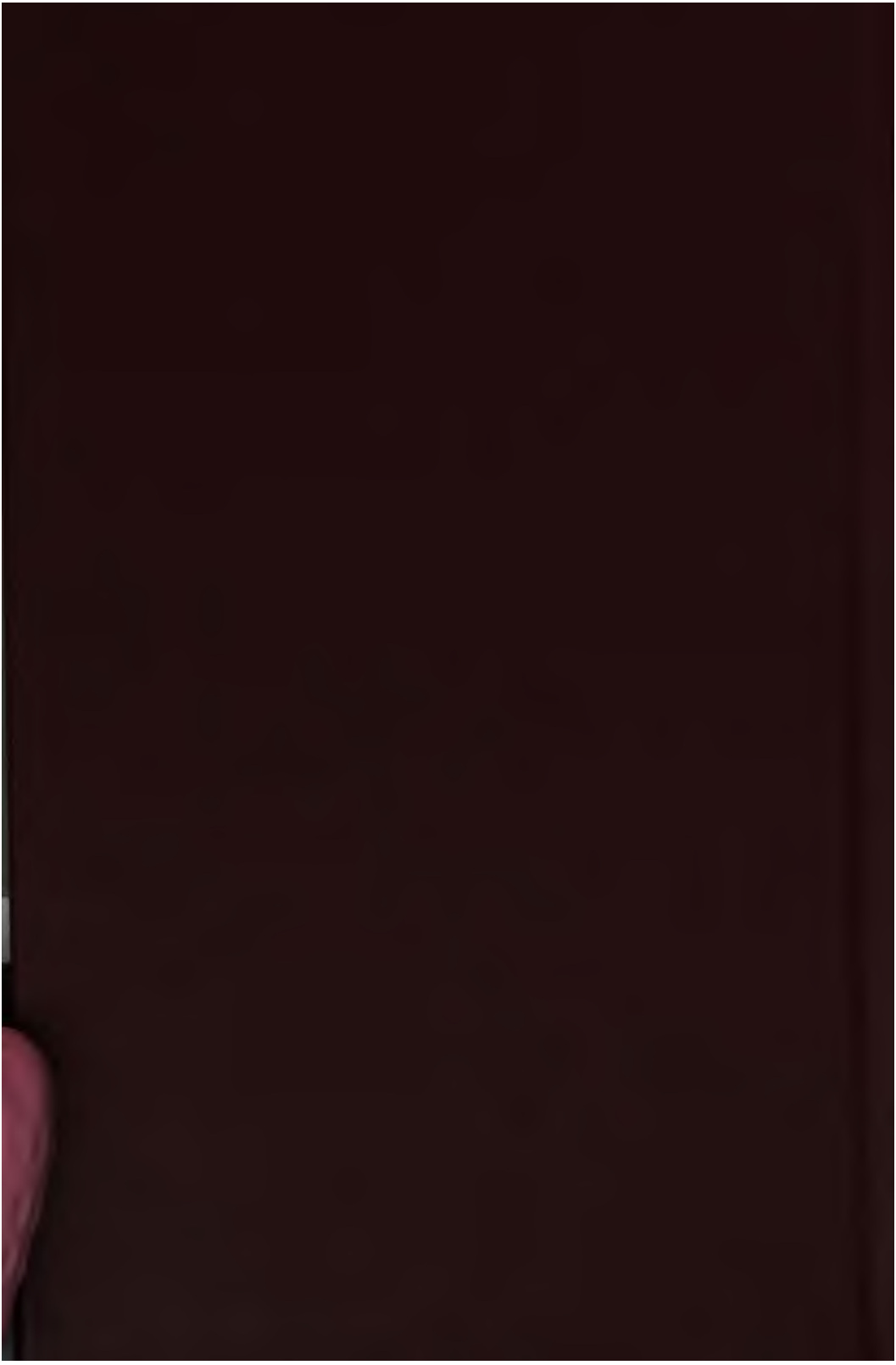
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